Common Sense Initiative, Automobile Manufacturing Sector

U.S. Automobile Assembly Plants and Their Communities: Environmental Economic, and Demographic Profile

Part III: Automobile/Light Duty Truck Assembly Plant-Community Profiles

52. Nissan Motor Mfg.
Smyrna, TN

December 1997

Contents and Guidelines for Use

Users of this profile should carefully review the description of methods, data limitations, and guidelines for use and interpretation of the data presented in Part I of the report.

Contents:

General Guidelines for Use

Efforts have been made to ensure that the data presented here are accurate. The Project Team could not independently verify data accuracy in all cases, however, and some errors may remain. The following is a partial list of factors that should be considered in using these profiles:

1. Current releases presented in this report represent only some of the contamination sources in a given area. Data on historical releases (prior to 1991) were not included, and releases from non-assembly plant emission sources were identified only through the Toxics Release Inventory (TRI). TRI data do not cover all sources of releases. Considering only TRI data for a given community may mis-state the relative contribution of plants and their neighboring TRI facilities to an area's total releases.
2. Care must be taken to distinguish true changes over time in environmental releases from apparent changes, due, for example, to changes in the scope of reporting requirements.
3. TRI data are often based on engineering estimates and are reported on an annual basis. Data on releases over shorter time frames are not available.
4. TRI, the Biennial Report and other databases do not include all substances and environmental releases of concern.

Notes on Comparisons Across Facilities

1. The following factors can affect an assembly plant's environmental profile, among other things: the number of vehicles produced, plant age, process equipment age, and vehicle size and configuration.
2. Some plants are highly-integrated, performing some parts and all assembly steps in-house. Others obtain parts from other manufacturing facilities, or share assembly operations with another plant.
3. States differ in how they define hazardous waste and how they treat recycled wastes and small quantity generators. Therefore, data on quantities of BRS wastes generated may not be comparable for plants located in different states.
4. Area-wide averages for economic and demographic characteristics may be better or worse measures of the plant’s immediate community, depending on the specific location of a plant within the reporting area.

Plant-Community Profile:
Nissan Motor Manufacturing
Smyrna TN

LOCATION

Address: 983 Nissan Drive, Smyrna TN 37167
Lat/Long: latitude (degrees N): 35 57' 47"
longitude (degrees W): 86 29' 43"
County: Rutherford MSA: Nashville TN
Other counties within 3 miles of plant: none

DESCRIPTION

Produced Altima, 200 SX, Pickup and Sentra in 1994.

ID NUMBERS

RCRA ID	TND054481205
AIRS ID	AFS4714900155
NPDES ID	-
TRI	37167NSSNMNISSA

OPERATIONS

	Production	Employment
Calendar Year: 1991	265,023	
1992	300,328	
1993	385,972	
1994	444,608	5,900

PLANT ENVIRONMENTAL PROFILE

RCRA BIENNIAL REPORT

Waste Code(s)	*Wastewater?*	*Physical Form*	*Source*	*Mgd. On/Off-Site*	*Management Method*	*Quantity Generated (tons)*	*Quantity Shipped (tons)*	*Quantity Mgd. On-Site (tons)*
1991								
D001 (ignitable)	?	Not rep't	Not rep't	Off	M122 evaporation	4.2	4.2	0.0
D001(ignit) F005 (solvents)	?	Not rep't	Not rep't	Off	M029 solvents recov. }	668.6	631.4	0.0
D001(ignit) F005 (solvents)	?	Not rep't	Not rep't	Off	M122 evaporation }		631.4	0.0
F001, D006, D007	?	Not rep't	Not rep't	Off	M122 evaporation	0.0	0.0	0.0
D008 (lead)	?	Not rep't	Not rep't	Not rep't	Not rep't	56.8	-	-
TOTAL - 1991						*729.6*	*1,267.0*	*0.0*
1993								
D001 (ignitable)	?	Not rep't	Not rep't	Off	M125 other treat.	7.8	7.8	0.0
D001 (ignitable)	?	Not rep't	Not rep't	Off	M125 other treat.	6.5	6.5	0.0
D001 (ignitable) F005 (solvents)	?	Not rep't	Not rep't	Off	M029 solvents recov.	1,367.7	1,367.7	0.0
D001(ignitable) D018 (benzene)	?	Not rep't	Not rep't	Off	M125 other treat.	7.7	7.7	0.0
D008 (lead)	?	Not rep't	Not rep't	Off	M125 other treat.	17.4	17.4	0.0
F003 (non-halog solvents)	?	Not rep't	Not rep't	Off	M125 other treat.	2.6	2.6	0.0
F003 (solvents) D001(ignitable)	?	Not rep't	Not rep't	Off	M125 other treat.	30.9	30.9	0.0
TOTAL - 1993						*1,440.7*	*1,440.7*	*0.0*

TOXICS RELEASE INVENTORY

Total lbs of TRI chemicals:	*Air-Fugitive Emissions*	*Air-Stack Emissions*	*Total Releases*	*Discharge to POTW*	*Off-Site Energy Recovery*	*Off-Site Recycling*	*Off-Site Treatment*	*Off-Site Disposal*	*Total Transfers*
1991	99,206	2,401,002	2,500,208	1,590	0	1,245,978	280	87,378	1,335,226
1992	37,221	2,793,616	2,830,837	1,677	0	1,598,984	130	79,229	1,680,020
1993	157,475	2,361,840	2,519,315	9,566	15,427	459,794	0	113,302	598,089
1994	201,823	2,226,962	2,428,785	8,064	6,016	752,305	0	38,902	805,287
Lbs. per vehicle produced:									
1991	0.37	9.06	9.43	0.01	0.00	4.70	0.00	0.33	5.04
1992	0.12	9.30	9.43	0.01	0.00	5.32	0.00	0.26	5.59
1993	0.41	6.12	6.53	0.02	0.04	1.19	0.00	0.29	1.55
1994	0.45	5.01	5.46	0.02	0.01	1.69	0.00	0.09	1.81

Plant-Community Profile:
Nissan Motor Manufacturing
Smyrna TN

PLANT ENVIRONMENTAL PROFILE (continued)

1994 TRI Emissions/Releases by Chemical (lbs.)

Chemical Name	*Air-Fugitive Emissions*	*Air-Stack Emissions*	*Total Releases*	*Discharge to POTW*	*Off-Site Energy Recovery*	*Off-Site Recycling*	*Off-Site Treatment*	*Off-Site Disposal*	*Total Transfers*
FORMALDEHYDE	31	9,798	9,829	0	595	0	0	0	595
METHANOL	94,211	56,875	151,086	0	154	0	0	0	154
N-BUTYL ALCOHOL	38	195,236	195,274	0	694	48,794	0	0	49,488
BENZENE	900	0	900	25	64	0	0	0	89
METHYL ETHYL KETONE	340	30,501	30,841	0	0	53,930	0	0	53,930
NAPHTHALENE	286	365	651	21	16	0	0	0	37
1,2,4-TRIMETHYLBENZENE	2,242	270,732	272,974	0	154	0	0	0	154
ETHYLBENZENE	3,599	55,558	59,157	0	202	77,043	0	0	77,245
STYRENE	900	0	900	0	64	0	0	0	64
METHYLENEBIS(PHENYLISOCYANATE)	250	0	250	0	0	0	0	0	0
BIS(2-ETHYLHEXYL) ADIPATE	250	27,475	27,725	0	0	0	0	0	0
ETHYLENE GLYCOL	4,529	2,307	6,836	0	0	0	0	0	0
METHYL ISOBUTYL KETONE	81	149,421	149,502	0	679	166,926	0	0	167,605
TOLUENE	6,758	92,632	99,390	22	401	25,681	0	0	26,104
CYCLOHEXANE	235	0	235	0	16	0	0	0	16
XYLENE (MIXED ISOMERS)	25,867	720,584	746,451	22	2,736	374,941	0	0	377,699
ALUMINUM OXIDE (FIBROUS FORM)	611	0	611	183	0	0	0	13,602	13,785
METHYL TERT-BUTYL ETHER	3,380	0	3,380	0	241	0	0	0	241
HYDROCHLORIC ACID	250	0	250	0	0	0	0	0	0
PHOSPHORIC ACID	250	0	250	0	0	0	0	0	0
SULFURIC ACID	250	0	250	0	0	0	0	0	0
BARIUM COMPOUNDS	32	0	32	380	0	0	0	1,903	2,283
COPPER COMPOUNDS	513	0	513	991	0	0	0	991	1,982
GLYCOL ETHERS	54,921	615,478	670,399	5,557	0	0	0	0	5,557
LEAD COMPOUNDS	250	0	250	97	0	4,990	0	4,406	9,493
MANGANESE COMPOUNDS	250	0	250	0	0	0	0	0	0
NICKEL COMPOUNDS	220	0	220	496	0	0	0	8,279	8,775
ZINC COMPOUNDS	379	0	379	270	0	0	0	9,721	9,991
TOTAL	***201,823***	***2,226,962***	***2,428,785***	***8,064***	***6,016***	***752,305***	***0***	***38,902***	***805,287***

VOC/NOx Emissions:

(lbs/year)	*VOCs*	*NOx*
1990	3,348,000	344,000
1991	NA	NA
1992	NA	NA
1993	3,642,000	548,000
1994	2,910,000	358,000

Plant-Community Profile:
Nissan Motor Manufacturing
Smyrna TN

COMMUNITY ENVIRONMENTAL PROFILE

TRI Chemical Releases & Transfers from Sources Within 3 Miles of Auto/LDT Plant (lbs.)

	Facility (w. map #)	*Air-Fugitive Emissions*	*Air-Stack Emissions*	*Total Releases*	*Discharge to POTW*	*Off-Site Transfers*	*Total Transfers*
1	SPAULDING COMPOSITES CO. FILAW	0	0	0	0	0	0
2	GREER-SMYRNA	0	0	0	0	0	0
4	MARINE GROUP INC.	113,728	113,511	227,239	0	0	0
	Total	***113,728***	***113,511***	***227,239***	***0***	***0***	***0***

Air Quality Attainment Status (as of 1994)*

ozone - nonattainment (moderate)
carbon monoxide - attainment or unclassifiable
particulates - unclassifiable
lead - unclassifiable
NO2 - cannot be classified or better than national standards
SO2 - attainment

* no changes in designations occurred between 1994 and 1996

Plant-Community Profile:
Nissan Motor Mfg.
Smyrna TN

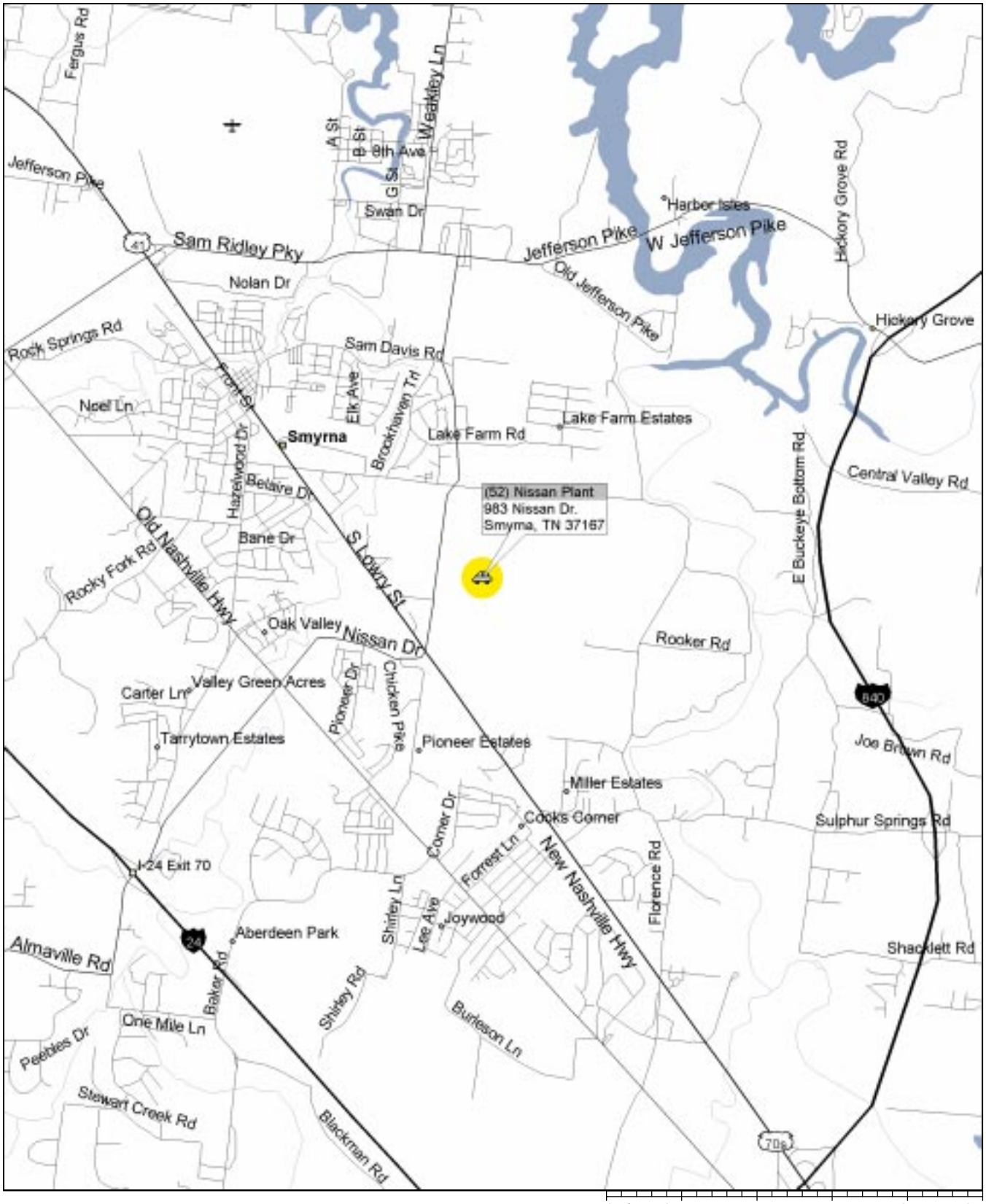
12/2/97

COMMUNITY DEMOGRAPHIC AND ECONOMIC CHARACTERISTICS

	Census Block	*0-1 Mile*	*0-3 Miles*	*1-3 Miles*	*3-5 Miles*	*County*	*State*	*U.S.*
Total Population (1994)	NA	NA	NA	NA	NA	140,701	5,175,233	260,340,990
Total Population (1990)	1,493	2,207	15,841	13,634	14,210	118,570	4,877,185	248,709,873
% Change 1990-1994	NA	NA	NA	NA	NA	19	6	5
Total Area (sq. mi.) (1990)	4.4	3.1	28.2	25.1	50.2	619.0	41,219.5	3,536,278.1
Population/sq. mi. (land area) (1990)	341	706	605	591	316	192	118	70
Median Household Income (1994)						NA	28,639	32,264
Median Household Income (1989)						30,878	24,807	30,056
% Change 1979-1989 (constant $)						16	5	7
% Change 1989-1994 (constant $)						NA	15	7
Per Capita Personal Income (1993)						18,498	18,439	20,800
Per Capita Personal Income (1989)						15,454	15,074	17,690
% Change 1989-1993 (current $)						20	22	18
Minority Percentage (1990)	6	3	4	5	6	10	16	20
Pct. of Households Below Poverty Level (1989)	21	10	11	11	12	16	18	20
Pct. Not Completing High School (1990)	33	29	25	24	25	24	31	25
Total Employment (1994) (civilian nonfarm)						75,653	2,665,000	131,056,000
Unemployment Rate (1994)						3	5	6
Manufacturing Employment (1993)						19,738	513,568	18,183,381
Mfgr. as % Total Employment (1993)						38	8	19
Manufacturing Employment (1992)						NA	504,000	18,253,000
Production Workers (1992)						NA	370,000	11,654,000
% Change in Mfgr. Employment 1987-1992						NA	4	-4
Assembly Plant as % Total Mfgr. Workers						30		

Data sources used were not always complete or current.
Attempts have been made to verify data, but errors may still exist.

Smyrna, TN, Nissan Plant



Microsoft Expedia Streets98

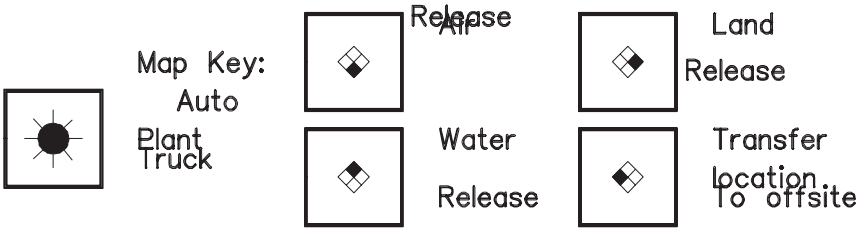
NISSAN MOTOR MFG CORP USA
983 NISSAN DR
SMYRNA TN
Tri Number: 37167NSSNMNISSA

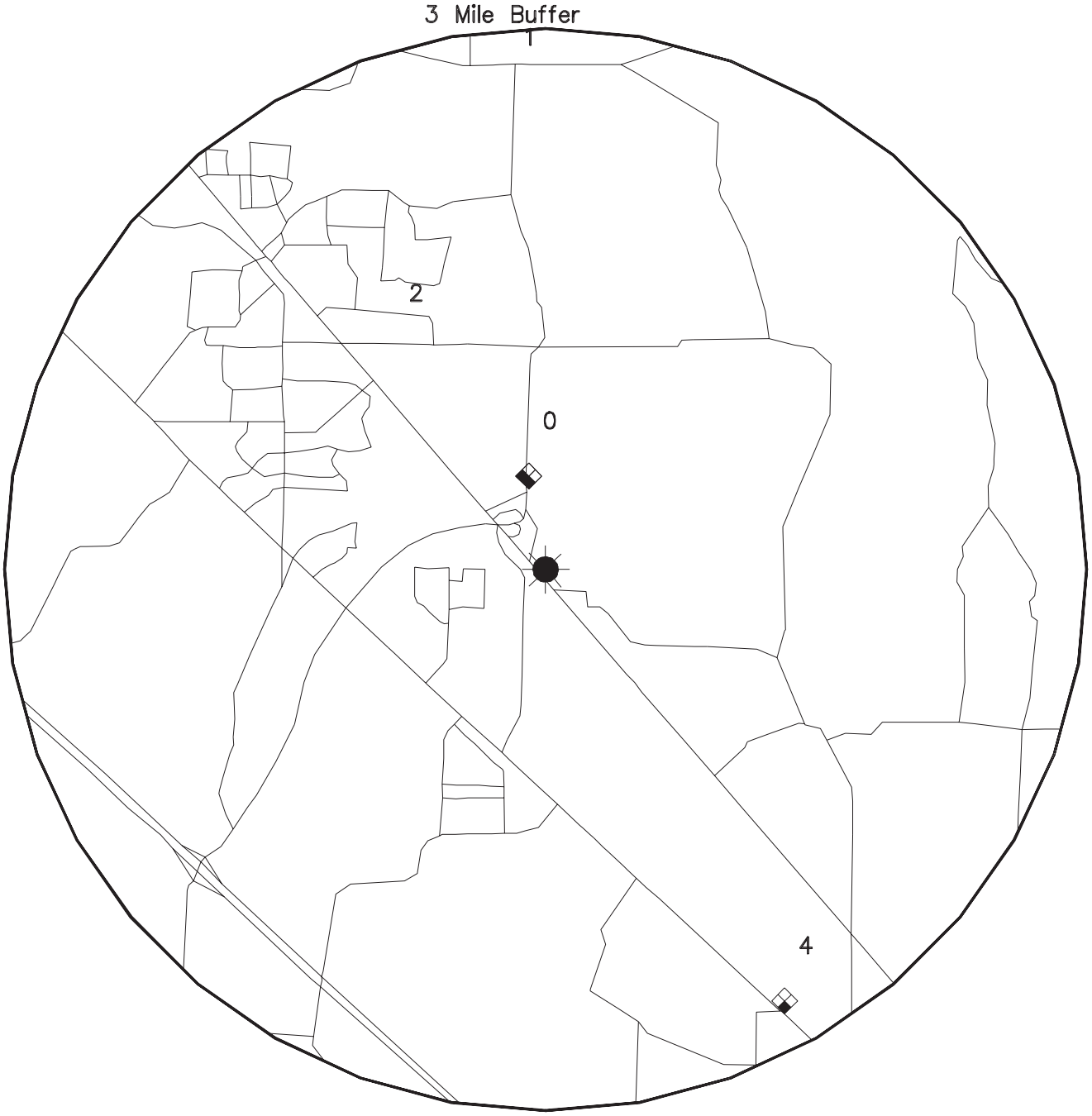
Map #	SIC	Name	Address	City	State
0	3711	NISSAN MOTOR MFG. CORP. USA CORP. USA	983 NISSAN DR.	SMYRNA	TN
1	3084	SPAULDING COMPOSITES CO. FILAWOUND DIV.	291 SAM RIDLEY PKY. E.	SMYRNA	TN
2	3451	GREER-SMYRNA	251 MAYFIELD DR.	SMYRNA	TN
4	3732	MARINE GROUP INC.	6776 OLD NASHVILLE HWY. P.O. BOX 720	MURFREESBORO	TN

AREA WIDE 1994 TRI EMISSION PROFILE

NISSAN MOTOR MFG CORP USA
RUTHERFORD COUNTY, Tennessee

Latitude: 35 57 47
Longitude: 86 29 43





Number without a Symbol denotes no reported emissions over 0.5 pounds per year

1994 TRI EMISSIONS (LB/YEAR) AT FACILITIES WITHIN THREE MILES OF
NISSAN MOTOR MFG CORP USA TRI N0: 37167NSSNMNISSA

Chemical Name	Air Fugitive (Non-Point Source) Emissions	Air Stack (Point Source) Emissions	Discharge to Surface Water	On-Site Land Disposal	TOTAL RELEASES	Discharge to POTW	Transfer	TOTAL TRANSFERS
NISSAN MOTOR MFG. CORP. USA CORP. USA			SIC DESCRIPTION: MOTOR VEHICLES & CAR BODIES SIC CODE: 3711				MAP LOCATION NO:	0
983 NISSAN DR. SMYRNA TN 37167								
FORMALDEHYDE	31	9,798	0	0	9,829	0	595	595
METHANOL	94,211	56,875	0	0	151,086	0	154	154
N-BUTYL ALCOHOL	38	195,236	0	0	195,274	0	49,488	49,488
BENZENE	900	0	0	0	900	25	64	89
METHYL ETHYL KETONE	340	30,501	0	0	30,841	0	53,930	53,930
NAPHTHALENE	286	365	0	0	651	21	16	37
1,2,4-TRIMETHYLBENZENE	2,242	270,732	0	0	272,974	0	154	154
ETHYLBENZENE	3,599	55,558	0	0	59,157	0	77,245	77,245
STYRENE	900	0	0	0	900	0	64	64
METHYLENEBIS(PHENYLISOCYANATE)	250	0	0	0	250	0	0	0
BIS(2-ETHYLHEXYL) ADIPATE	250	27,475	0	0	27,725	0	0	0
ETHYLENE GLYCOL	4,529	2,307	0	0	6,836	0	0	0
METHYL ISOBUTYL KETONE	81	149,421	0	0	149,502	0	167,605	167,605
TOLUENE	6,758	92,632	0	0	99,390	22	26,082	26,104
CYCLOHEXANE	235	0	0	0	235	0	16	16
XYLENE (MIXED ISOMERS)	25,867	720,584	0	0	746,451	22	377,677	377,699
ALUMINUM OXIDE (FIBROUS FORM)	611	0	0	0	611	183	13,602	13,785
METHYL TERT-BUTYL ETHER	3,380	0	0	0	3,380	0	241	241
HYDROCHLORIC ACID	250	0	0	0	250	0	0	0
PHOSPHORIC ACID	250	0	0	0	250	0	0	0
SULFURIC ACID	250	0	0	0	250	0	0	0
BARIUM COMPOUNDS	32	0	0	0	32	380	1,903	2,283
COPPER COMPOUNDS	513	0	0	0	513	991	991	1,982
GLYCOL ETHERS	54,921	615,478	0	0	670,399	5,557	0	5,557
LEAD COMPOUNDS	250	0	0	0	250	97	9,396	9,493
MANGANESE COMPOUNDS	250	0	0	0	250	0	0	0
NICKEL COMPOUNDS	220	0	0	0	220	496	8,279	8,775
ZINC COMPOUNDS	379	0	0	0	379	270	9,721	9,991
SUBTOTALS	201,823	2,226,962	0	0	2,428,785	8,064	797,223	805,287
SPAULDING COMPOSITES CO. FILAWOUND DIV.			SIC DESCRIPTION: PLASTIC PIPE SIC CODE: 3084				MAP LOCATION NO:	1
291 SAM RIDLEY PKY. E. SMYRNA TN 37167								
SUBTOTALS	0	0	0	0	0	0	0	0

1994 TRI EMISSIONS (LB/YEAR) AT FACILITIES WITHIN THREE MILES OF
NISSAN MOTOR MFG CORP USA TRI N0: 37167NSSNMNISSA

Chemical Name	Air Fugitive (Non-Point Source) Emissions	Air Stack (Point Source) Emissions	Discharge to Surface Water	On-Site Land Disposal	TOTAL RELEASES	Discharge to POTW	Transfer	TOTAL TRANSFERS
GREER-SMYRNA			SIC DESCRIPTION: SCREW MACHINE PRODUCTS				MAP LOCATION NO:	2
			SIC CODE: 3451					
251 MAYFIELD DR.								
SMYRNA TN 37167								
SUBTOTALS	0	0	0	0	0	0	0	0
MARINE GROUP INC.			SIC DESCRIPTION: BOAT BUILDING AND REPAIRING				MAP LOCATION NO:	4
			SIC CODE: 3732					
6776 OLD NASHVILLE HWY. P.O. BOX 720								
MURFREESBORO TN 37129 8400								
1,1,1-TRICHLOROETHANE	85,350	0	0	0	85,350	0	0	0
STYRENE	28,378	113,511	0	0	141,889	0	0	0
SUBTOTALS	113,728	113,511	0	0	227,239	0	0	0

Nissan Motor Mfg.
Smyrna Rutherford County, Tennessee

Latitude: 35 57 47 N
Longitude: 86 29 43 W

MAP KEY:

- County Boundries
- Inter State Highway
- US Highway
- Rail Road
- One Mile
- Three Miles
- Five Miles

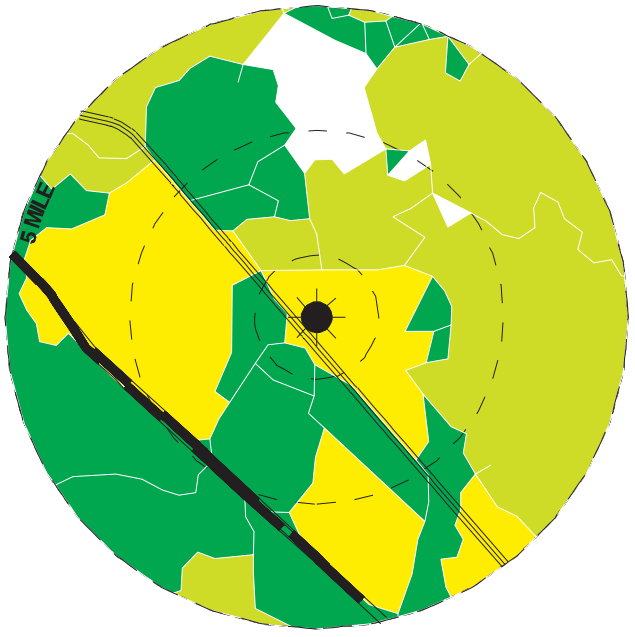
POPULATION DENSITY / SQ. MILE

- Greater than 10000
- 1000 - 10000
- 100 - 1000
- 10-100
- 1-10

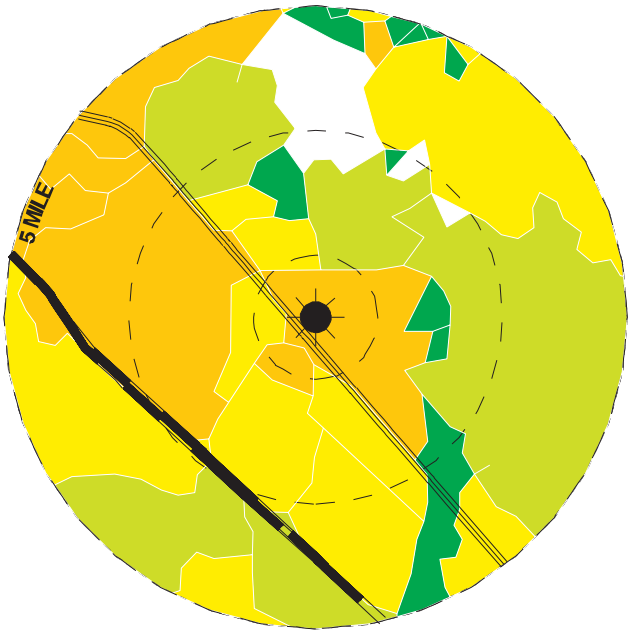
Minority, poverty, and High School Incomplete percentages

- Greater than 50
- 40 - 50
- 30 - 40
- 20 - 30
- 10 - 20
- 0 - 10

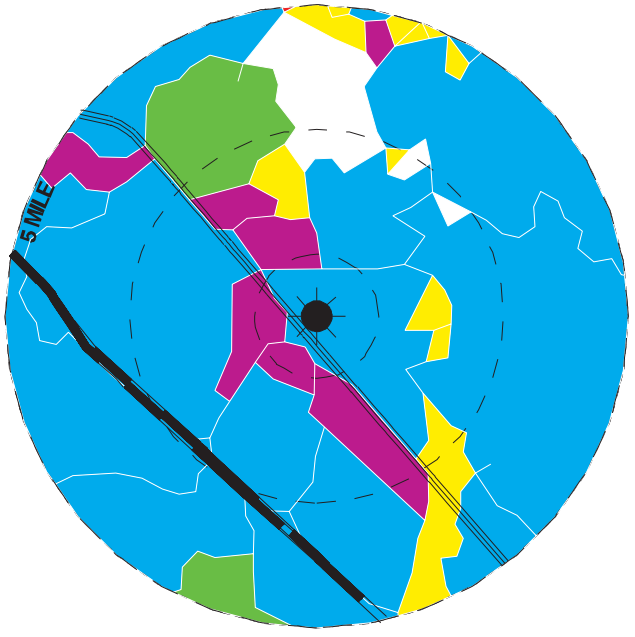
Percentage of Total Population Below Poverty Level



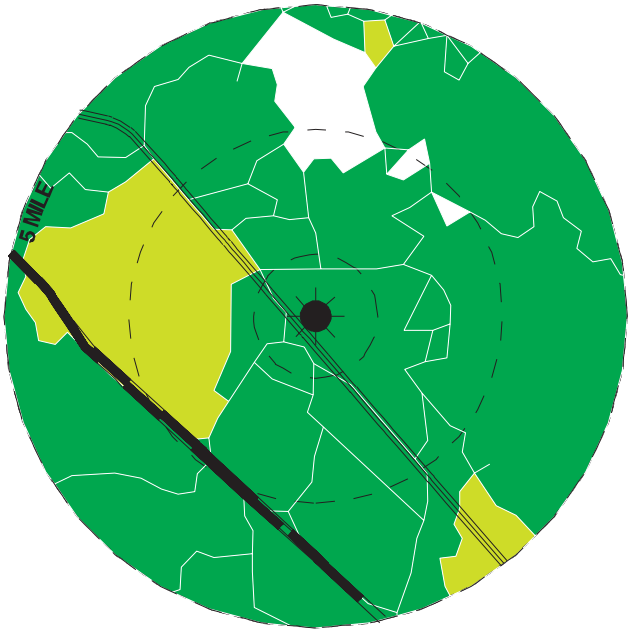
Percentage of Population not Completing High School



Population Density People Per Sq. Mile



Minority Population Percent of Total Population



Nissan Motor Mfg.
Smyrna Rutherford County, Tennessee

Latitude: 35 57 47 N
Longitude: 86 29 43 W

MAP KEY:

- County Boundries
- Inter State Highway
- US Highway
- Rail Road
- One Mile
- Three Miles
- Five Miles

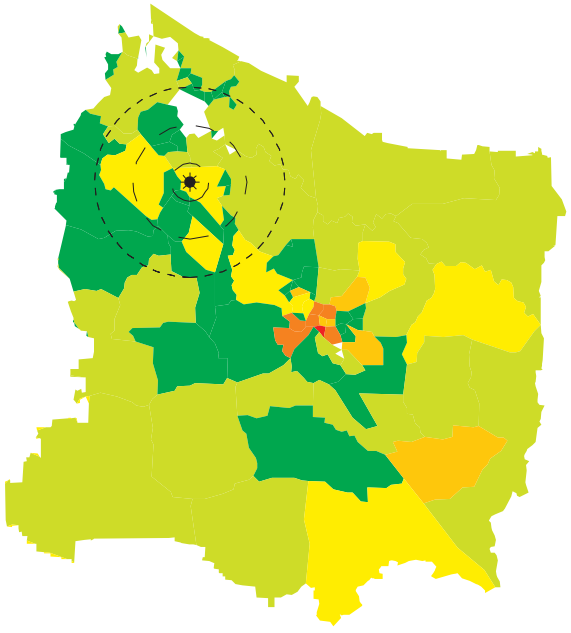
POPULATION DENSITY / SQ. MILE

- Greater than 10000
- 1000 - 10000
- 100 - 1000
- 10-100
- 1-10

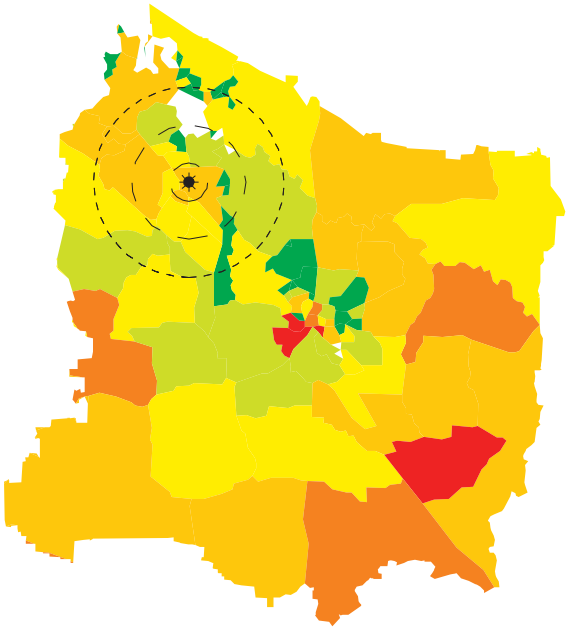
Minority, poverty, and High School Incomplete percentages

- Greater than 50
- 40 - 50
- 30 - 40
- 20 - 30
- 10 - 20
- 0 - 10

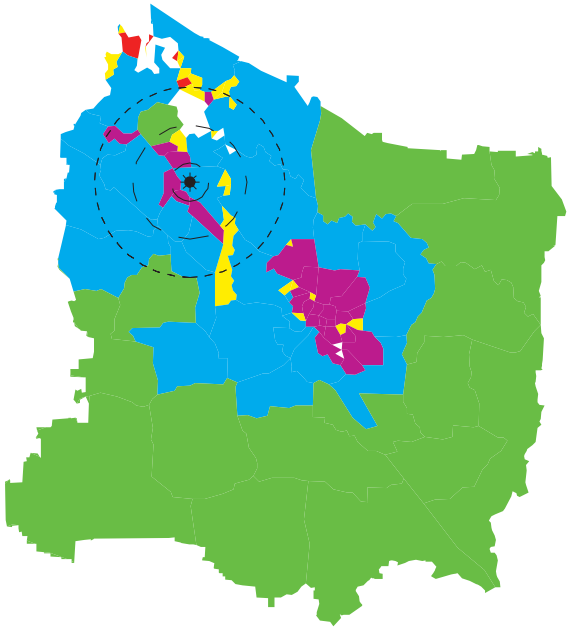
Percentage of Total Population Below Poverty Level



Percentage of Population not Completing High School



Population Density People Per Sq. Mile



Minority Population Percent of Total Population